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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,731	10/25/2006	Stefan Leyen	DNAG-310	1384

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EXAMINER

STEWART, JASON-DENNIS NEILKEN

ART UNIT	PAPER NUMBER
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3738

NOTIFICATION DATE	DELIVERY MODE
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06/03/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

nyipdocket@fulbright.com

Office Action Summary	Application No. 10/549,731	Applicant(s) LEYEN ET AL.	
	Examiner JASON-DENNIS STEWART	Art Unit 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following is a Final Office action in response to communications received on 03/24/2011. Claims 35-45 are currently pending and addressed below.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 35-41, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunz et al. WO 01/05338 in view of Martinie 3,683,421.

3. Regarding Claims 35-37, Bunz discloses a hip joint prosthesis comprising an inner sliding cup made of ceramic material that is surrounded on its outside by a plastic covering for inserting into an outer, metal cup of an artificial hip (abstract).

However, Bunz does not disclose a plurality of surface depressions arranged circumferentially on the outside of the sliding cup.

Martinie teaches a prosthetic joint assembly with a socket assembly in which a bone attachment socket has a plurality of projections or ribs 62 on its out surface to

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more firmly secure it to an acrylic seat 56 which would have mating depressions (col. 3, ll. 17-23).

It would have been obvious to one of ordinary skill in the art to modify the attachment mechanism of Bunz with the plurality of projections or ribs of Martinie in order to more firmly secure a socket to the seating portion as taught by Martinie (col. 3, ll. 17-23).

4. Regarding Claim 38, Bunz in view of Martinie does not explicitly teach that the depressions are "semicircular"; however, Martinie does teach that other configurations other than the projections or ribs may be employed to secure the socket. It would have been an obvious matter of design choice to make the depressions and mating depressions semicircular, since the applicant has not disclosed that semicircular depressions solve any problem or is for a particular reason. It appears that the claimed invention would perform equally well with the more angular projections and depressions of Martinie.

5. Regarding Claim 39, Bunz illustrates a sliding cup (1) having a stepped structural form on its outside (fig. 2).

6. Regarding Claim 40, Bunz illustrates the plastic covering embracing the sliding cup at its pin end (fig. 2).

7. Regarding Claim 41, Bunz illustrates a collar of the plastic covering 5 that rests on the upper side of the sliding cup and covers almost half of the upper edge (fig. 2).

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8. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bunz et al. WO 01/05338 in view of Martinie 3,683,421, as applied to Claim 35, further in view of Teinturier (5,041,140).

Bunz in view of Martinie discloses the invention as claimed and as discussed above. Martinie also teaches the firm "seating" of an attachment socket into an acrylic seat. However, although implied, Bunz in view of Martinie does not clearly disclose a press fit between the sliding cup and the plastic covering.

Teinturier teaches a press fit between a plastic cup 42 and a metal shell in order to allow the acetabulum unit to adapt to deformations of the skeleton as taught by Teinturier (col. 4, ll. 59-62).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the sliding cup of Bunz in view of Martinie by press fitting it into the plastic covering as taught by Teinturier in order to allow for deformation of the skeleton by the hip prosthesis.

9. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunz et al. WO 01/05338 in view of Martinie 3,683,421, as applied to claim 35 above, and further in view of McLean et al. 2004/0054418.

10. Regarding Claim 43, Bunz in view of Martinie discloses the invention as claimed and as discussed above. However, Bunz in view of Martinie does not disclose an eccentric relationship between the inner and outer form of the sliding cup.

McLean et al. discloses a hip implant with an eccentric relationship between the inner surface 30 and the outer surface 26 of an articulating surface shell in order to improve migration and other properties of the prosthesis (paragraph 49).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the sliding cup of Bunz in view of Pope with the eccentric relationship of McLean in order to optimize articulating wear properties of the sliding cup relative to the femoral head (paragraph 49).

11. Regarding Claim 44, Bunz in view Martinie and further in view of McLean discloses the invention as claimed and discussed above, however Bunz does not positively recite the range claimed in Claim 34. It has been held that "the normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages." *In re Peterson*, **see MPEP 2144.05, Part II, section A.**

Response to Arguments

12. Applicant's arguments filed 03/24/2011 have been fully considered but they are not persuasive.

13. The Applicant argues that the intermediate bone attachment socket 60 of Martinie corresponds to the plastic covering of the present invention corresponds to the plastic covering of the instant invention. While the Examiner disagrees that specific parts of the invention of Martinie can be generally characterized as "corresponding" with

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other parts of the instant invention, it should be noted that Martinie was not used as a teaching to show the specific parts of the hip prosthesis as claimed. Those

“corresponding” parts are found in the base reference, Bunz et al. WO 01/05338.

Martinie was used as a teaching simply to show that it is known and practiced in the art to use a series of projections and mating depressions to connect two socket-like layers of a hip prosthesis. Martinie clearly teaches the concept of connecting via projections and depressions, and one of ordinary skill in the art would recognize this as one of many methods for connecting acetabular prosthesis layers.

14. The Applicant also argues that the intermediate bone attachment socket 60 does not have depressions on its surface. The Examiner respectfully disagrees. The spaces between the projections or ribs 62 are interpreted as "depressions" as broadly claimed since they are of a lower elevation that the surround peaks of the projections 62. It is inherent that projections would be accompanied by depressions. For example, if two separate mountains were next to one another, a valley would be formed between them.

15. The Applicant also argues that the purpose of the projections used in Martinie is different than the raised structures of the instant application. It should be noted, in device claims such as claim 35 of the instant application, functional limitations are not given patentable weight in the absence of differentiating structure. Furthermore, the limitation “to achieve high level strength with regard to tilting” is not claimed; therefore, the argument is not relevant to the invention as claimed.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON-DENNIS STEWART whose telephone number is (571)270-3080. The examiner can normally be reached on M-F (alt Fridays off) 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571)272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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